

## Operation notes on nvidia TX2

### 1. adb devices shows “no\_permissions”

(ref: <https://stackoverflow.com/questions/53887322/adb-devices-no-permissions-user-in-plugdev-group-are-your-udev-rules-wrong>)

```
# Check vid/pid
```

```
$ lsusb
```

```
# create and edit rules file
```

```
$ sudo vi /etc/udev/rules.d/51-android.rules
```

```
# add following string to “51-android.rules”
```

```
SUBSYSTEM=="usb", ATTR{idVendor}=="05c6", ATTR{idProduct}=="90cb", MODE="0666",  
GROUP="plugdev"
```

```
# reload rules file
```

```
$ sudo udevadm control --reload-rules
```

重新 plug-in/out usb

再次 adb devices 查看結果.

### 2. ffmpeg cmd finds no video devices, /dev/video\* can't find devices.

(ref: <https://askubuntu.com/questions/1214794/usb-camera-is-not-detected-anymore>)

```
$ sudo apt install uvcdynctrl
```

### 3. python and opencv-python issues

*#reinstall specified cv2 version to avoid any different appearance.*

```
$ pip3 uninstall opencv-python
```

```
$ pip3 install opencv-python==4.5.1.48
```

If terminal shows "python setup.py egg\_info" failed with error code 1", refer to following:

(ref: <https://www.itread01.com/content/1560824403.html>)

*# upgrade pip*

```
$ pip3 install --upgrade pip
```

*# install setuptools*

```
$ pip3 install setuptools
```

*# May show warnings, change to use following cmd.*

```
$ python3 -m pip install setuptools.
```

*# re-install opencv-python*

```
$ pip install opencv-python==4.5.1.48
```

*# May show warnings, change to use following cmd.*

```
$ python3 -m pip install opencv-python==4.5.1.48
```

*# try to run python3 and import cv2*

```
$ python3
```

```
>> import cv2
```

If terminal shows "Illegal instruction (core dumped)" → install numpy v1.19.4

(ref: <https://blog.csdn.net/lun55423/article/details/114574573>)

```
>> exit()
```

```
$ python3 -m pip install numpy==1.19.4
```

#### 4. python and opencv issues

Issues: `tryioctl videoio(v4l2 /dev/video0) select() timeout`

(ref: <https://www.raspberrypi.org/forums/viewtopic.php?t=35689>)

`lsmod`

`sudo rmmod uvcvideo`

`sudo modprobe uvcvideo quirks=128 nodrop=1 timeout=6000`

重開機

Issues: `cv2.VideoCapture` can't open camera by index

須改用 `sudo` 執行, e.g.:

`Sudo 1_runuvctool.sh`

Or

`Sudo 2_openapp.sh`

`Sudo python3 pyCVTest_ub.py`